

REMARKS

Reconsideration and allowance of this subject application are respectfully requested.

Applicant received only an initialed page 1 of the two page PTO-1449 form submitted with the Information Disclosure Statement on August 28, 2003. Please provide an initialed page 2 with next official action.

Applicant notes with appreciation the Examiner's allowance of claims 58, 59, 61, 62 and 64-73 and indication of allowable subject of independent claims 20, 40, 54, and 55. Claim 20 has been rewritten in independent claim format and should now be allowed. Claim 40 has been rewritten in independent format and should also be allowed. The subject matter of claim 54 has been incorporated into independent claim 29, rendering claim 29 and its dependent claims allowed. Claim 55 has been rewritten in independent claim format. Since claim 56 depends from claim 55, both claims 55 and 56 should be allowed.

Claim 1 stands rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite. The terminology "home agent router" in line 7 is objected to for lacking sufficient antecedent basis. The phrase "home agent router" has been replaced with "home agent mobility tunnel servers" which finds antecedent basis in previously-defined "plural home agent mobility tunnel servers." Withdrawal of the rejection 35 U.S.C. §112, second paragraph is respectfully requested.

Claims 1, 2, 6-15, 17-19, 35-38, 41, and 42 stand rejected under 35 U.S.C. §102(e) as being anticipated by newly-cited U.S. Patent 6,407,988 to Agraharam. This rejection is respectfully traversed.

Claim 1 recites "plural home agent mobility tunnel servers, coupled to a backbone of the Internet, and forming a virtual home agent network." Agraharam discloses in Figure 1 wide area networks, such as 111-1 and 111-2. Both include a home agent/foreign agent server. But there is no teaching of forming a virtual home agent network including plural home agent mobility tunnel servers. The Examiner refers to Agraharam at column 4, lines 33-39. This text explains that the

virtual home address of the mobile 100.1 represents the mobile host's address in its "virtual home network," a premises network 120.1 where the mobile host 100.1 is located when it does not move. The virtual home address is released only to the mobile host's home agent 104.1..., and, at times, a pseudo home agent.

Contrary to the Examiner's contention, Agraharam's virtual home network is not a virtual home agent network as recited in claim 1. Instead, it corresponds to the premises network 120.1 where the mobile host is located when it does not move. This text in Agraharam does not teach plural home agent mobility tunnel servers forming a virtual home agent network.

Nor does Agraharam teach the recited "home agent mobility manager." The Examiner identifies DHCP server 105-1 and log-on/registration server 106-1. It is not apparent how either of these servers corresponds to a home agent mobility manager. Neither 105-1 nor 106-1 "establish a data tunnel between the home agent mobility tunnel

servers and one of the foreign agents to communicate with one or the mobile nodes." For example, where does Agraharam teach the DHCP server 105-1 or the log-on/registration server 106-1 identifying one of plural home agent mobility tunnel servers with which to establish a data tunnel with a foreign agent? Although the Examiner makes reference to Figure 8, this figure relates to "a procedure that is invoked when the mobile host 100.2 moves among different foreign networks." Col. 9, lines 23-25. There is still no teaching of plural home agent mobility tunnel servers forming a virtual home agent network for the mobile node. Each MAIN 111.1-111.5 includes only one home agent or one foreign agent. Nor is there any teaching in Figure 8 of the claimed home agent mobility manager, since all that is shown in Figure 8 are home and foreign agents.

Features of claims that depend on claim 1 are also absent in Agraharam. For example, claim 13 recites that "one of the foreign agent routers serving the mobile node is configured to send registration messages to all home agent routers in the virtual home agent network." The Examiner refers to Figures 5-8 and column 4, lines 33-34, which have already been addressed above and have been found lacking regarding any teaching of a virtual home agent network. The Examiner fails to identify any explicit teaching in Agraharam of a foreign agent router sending registration messages "to all home agent routers in the virtual home agent network." As explained at column 4, beginning at line 40, when the mobile host determines that it is at its virtual home network, "it communicates with its home agent 104.1, (column 4, lines 44-45), and when it is located in a foreign network "it registers with a foreign agent 104.2," (column 4, lines 52 and

53). There is no teaching of registering with all plural home agent routers in a virtual home agent network.

Agraharam fails to disclose the features of claim 37 including "configuring plural home agents as virtual home agent network for one of the mobile nodes" and "one of the foreign agents serving the mobile node sending registration messages to all home agents in the virtual home agent network." Because Agraharam lacks features recited in claims 1 and 37, the anticipation rejection of claims 1 and 37 (and their dependent claims) should be withdrawn.

Claims 23-28 stand rejected under 35 U.S.C. §103 as being unpatentable over Agraharam. This rejection is respectfully traversed.

Claims 24-28 depend ultimately from claim 1 which has been clearly distinguished from Agraharam above. Regarding claim 23, the Examiner admits that Agraharam fails to disclose or suggest that the home agent and foreign agent routers communicate using a mobile Internet protocol and that the tunnel includes a label switched path that uses multiprotocol label switching. In an attempt to remedy these admitted deficiencies, the Examiner relies upon U.S. Patent 6,493,317 to Ma. But even if the combination of Agraharam and Ma were accepted, for purposes of argument only, the Examiner fails to point out where the combination teaches that as the mobile node moves from one foreign agent to another foreign agent, "the home agent is configured to inject an address associated with the mobile node into the label switched path." Given this


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fundamental deficiency, Applicant need not even address whether this combination has the requisite motivation to combine required for any obviousness-type combination.

The reasons set forth above, all claims should be allowed. An early notice to that effect is earnestly solicited.

Respectfully submitted,

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